Diseases

Black spot

Black spot is a fungus common to rose bushes. Symptoms appear as coal-black lesions on upper and lower surfaces of leaves. Heavily diseased leaves tend to turn yellow and drop prematurely. When excessive premature defoliation occurs, the plant forms a new set of leaves, which causes a considerable drain on food reserves in the roots. This results in a weakened plant with poorly matured wood. A few days after the spots first appear, little black pimples show up in the spots; this signals that the spores are about to be discharged and you should act fast to remove and discard those leaves. Spores are carried by air currents, insects, tools, hands and clothing.

Prevention

When selecting a rose bush to buy, consult a knowledgeable nursery person or the WSU Extension agent or Master Gardeners for varieties that are less prone to black spot. Some varieties are more susceptible than others.

Physical control

Remove infected leaves from the bush and those already fallen on the ground so they can't reinfect the plant. Prune away excess foliage and sickly canes to improve air circulation. In the spring, remove the mulch around the base of the plant and rake the ground thoroughly to expose it to the sun. When new shoots appear, apply generous amounts of new mulch. Never water roses from overhead. Keep the foliage as dry as possible because dry leaves won't support the fungus.

Least-toxic chemical control

Dust with a finely ground sulfur when temperatures are under 85 degrees. It tends to burn leaves if applied in very hot weather.

Blight

The term blight is used to refer to a great number of plant diseases that affect a number of plants in one area, rather than isolated cases. Most

blights are caused by pathogenic organisms, generally fungi, but sometimes bacteria, and are manifested by browning foliage, reduced vigor and death of the plant. Early and late blight, which strikes potatoes and tomatoes, and brown rot blossom blight, which affects cherries, peaches and plums, are common in the region. Blights spread readily when plants are wet. A warm, humid spring increases the chance of blight problems. Warmer, drier weather may check the spread of blight.

Prevention

Most diseases – including blights – are almost impossible to eliminate once they have taken hold of a plant. The best we can hope for is to try to prevent them from starting and, if that fails, to prevent them from spreading. Blight-resistant varieties of plants are available. Don't water tomatoes overhead at night. The foliage can't dry off and this increases the potential for blight problems.

Physical control

As mentioned above, once the plant is infected with blight, it is virtually impossible to control. Pick off and destroy infected parts when you spot the first sign to prevent the disease from spreading.

Least-toxic chemical control

A fungicide spray of copper may be effective in preventing late blight on tomatoes and brown rot blossom blight on fruit trees.

Dogwood anthracnose

Not to be confused with the disease of oaks, maples, sycamores and other plants, anthracnose is a common name used for many unrelated plant diseases that cause leaf spots and dieback. Because of its lethal effects on many species of dogwood, this particular fungus has earned the scientific name Discula destructiva. It attacks most species of dogwood, including flowering dogwood and our native dogwood, but does not occur on Korean (also known as kousa) dogwood.

Diseased plants typically have spots on the leaves and flowers that are light to dark brown with purplish margins. These spots produce spores,

which spread via wind and rain to other leaves and create more spots. Severely infected trees will have poor growth, produce few leaves, small leaves and many sprouts at or near the base of the tree, and will eventually decline and die.

Prevention

Whenever possible, plant kousa dogwoods. They are lovely trees, with dark, glossy green leaves and creamy white flowers. There is at least one pink-flowering variety available as well. They bloom after other dogwoods, usually in June.

Physical control

Rake up diseased leaves and remove them. Prune the tree to increase air circulation, which may lessen the occurrence of leaf spots. Also, infected trees often produce many sprouts at or near the base of the tree, which are especially susceptible to infection. These should be removed. Finally, be sure the tree receives adequate water, preferably from an irrigation source that does not wet the leaves.

Least-toxic chemical control

The only effective control is a chemical leaf spray available only through tree care companies. It must be applied several times a year, beginning in early spring.

Powdery mildew

Powdery mildew is a white or grayish powdery coating on the surfaces of leaves, stems and buds. It germinates on dry leaves in high humidity and is commonly found on fruit trees, roses and big shade trees. Rain inhibits it and warm, damp nights encourage it. It can cause stunting and distortion of leaves, buds and growing tips, a general decline in plant growth, yellowing of leaves and premature leaf fall.

Physical control

Prune and thin out excess branches to increase air circulation. Plant resistant varieties, and put them in sunny locations.

Least-toxic chemical control

Spray with a mixture of 1 gallon water, 3 teaspoons baking soda, 2 1/2 tablespoons horticultural oil and 1/2 teaspoon insecticidal soap. Spray this on an unobtrusive area of your plant first, and watch for signs of adverse effects before spraying your entire plant.

Rust

Rust is a fungus with orange to brownish pustules on the underside and pale yellow spots on the tops of grass blades, snapdragon or hollyhock leaves, raspberries and rose bushes. It is common on Kentucky bluegrass and on the weed annual bluegrass.

Prevention

Pick off and destroy affected leaves as soon as they are noticed. Leaves must be wet for four hours to become infected, so careful watering can help prevent it.

Mow the lawn shorter to improve air circulation and apply a nitrogen-predominant fertilizer that contains sulfur. Choose a grass seed mixture containing fine fescues and perennial rye grass, two species that are less susceptible to rust.

Least-toxic chemical control

Periodic dustings of sulfur have been found to be somewhat effective, but you should not need this unless preventive measures have failed. Sulfur can be highly irritating to the respiratory system. Wear nose and mouth protection when applying.

Scab

Scab is a name given to several fungus diseases. One infects apple and other fruit trees, another infects cucumbers and yet another can infect potatoes. On fruit trees, scab generally appears first on the undersides of the leaves as pale yellow spots that gradually darken until they are nearly black. Leaves may have numerous scab spots and become distorted. The scab fungus overwinters on the fallen infected leaves, producing spores in

spring. The spores are wind borne and infect the young leaves and fruit during periods of rain. Warm rainy weather is ideal for scab.

Prevention

For potatoes, scab is particularly severe in alkaline soils and usually worse in dry soil. Avoid using lime, fresh manure or wood ashes on your potato beds, as these will increase the alkalinity. If potato scab has been a problem, you should practice a three- to five-year crop rotation schedule. Always plant resistant varieties of potatoes and apples.

Physical control

Because the fruit tree fungus spends the winter on fallen infected leaves, rake them up carefully and dispose of them. Careful pruning for good air circulation creates a less favorable environment for the spread of scab.

Least-toxic chemical control

Dormant lime sulfur sprayed on the fruit trees during the winter will help control it. In the spring, if your plants are in serious trouble, continue using lime-sulfur spray or wettable sulfur.